

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A semiconductor device, comprising:
a first semiconductor package in which a first semiconductor chip is mounted;
a second semiconductor package in which at least one semiconductor chip is mounted and is supported on the first semiconductor package such that ends of the second semiconductor package are arranged above the first semiconductor chip; and
a third semiconductor package that is supported on the first semiconductor package such that ends of the third semiconductor package are arranged above the first semiconductor chip;
wherein the second semiconductor package and the third semiconductor package are separated from each other.

2-3. (Cancelled)

4. (Previously Presented) The semiconductor device according to claim 1, wherein at least one of a size, thickness and material is different between the second semiconductor package and the third semiconductor package.

5. (Currently Amended) The semiconductor device according to claim [[3]] 1, wherein at least one gap selected from the group including:

a gap between the second semiconductor package and the third semiconductor package;

a gap between the first semiconductor package and the second semiconductor package; and

a gap between the first semiconductor package and the third semiconductor package;

is filled with resin.

6. (Original) The semiconductor device according to claim 1, wherein:

the first semiconductor package further comprises:

a first carrier substrate in which a first semiconductor chip is flip-chip mounted; and

the second semiconductor package further comprises:

a second semiconductor chip;

a second carrier substrate in which the second semiconductor chip is mounted;

protruding electrodes which are bonded onto the first carrier substrate and holds the second carrier substrate above the first semiconductor chip; and

a sealing agent, which seals the second semiconductor chip.

7. (Original) The semiconductor device according to claim 6, wherein the first semiconductor package is a ball grid array in which the first semiconductor chip is flip-chip mounted on the first carrier package, and the second semiconductor package is one of a ball grid array and a chip-size package in which the second semiconductor chip mounted on the second carrier substrate is sealed with a mold.

8. (Original) The semiconductor device according to claim 6, wherein the protruding electrodes are arranged at least at four corners of the second carrier substrate, and are excluded from a mounting region of the first semiconductor chip.

9. (Original) The semiconductor device according to claim 6, wherein the first semiconductor chip is a logic-processing element, and the second semiconductor chip is a memory element.

10. (Currently Amended) A semiconductor device, comprising:
a first semiconductor package in which a first semiconductor chip is mounted;
a second semiconductor package having a second semiconductor chip that is supported on the first semiconductor package such that ends of the second semiconductor chip are arranged above the first semiconductor chip; and
a third semiconductor package having a third semiconductor chip that is supported on the first semiconductor package such that ends of the third semiconductor chip are arranged above the first semiconductor chip;

wherein the second semiconductor package and the third semiconductor package are separated from each other.

11. (Original) The semiconductor device according to claim 10, wherein the second semiconductor chip includes a three-dimensional mounting structure.

12. (Currently Amended) An electronic device, comprising:
a first package in which an electronic component is mounted;
a second package that is supported on the first package such that ends of the second package are arranged above the electronic component; and
a third package that is supported on the first package such that ends of the third package are arranged above the electronic component;
wherein the second package and the third package are separated from each other.

13. (Currently Amended) Electronic equipment, comprising:
a first semiconductor package in which a semiconductor chip is mounted;
a second semiconductor package that is supported on the first semiconductor package such that ends of the second semiconductor package are arranged above the semiconductor chip;
a motherboard on which the second semiconductor package is mounted; and

a third semiconductor package that is supported on the first semiconductor package such that ends of the third semiconductor package are arranged above the semiconductor chip;

wherein the second semiconductor package and the third semiconductor package are separated from each other.

14-18. (Cancelled)